



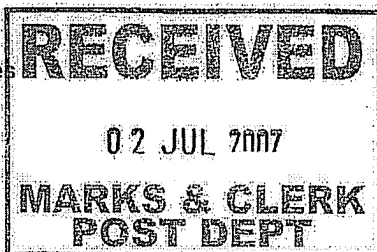
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Reference: EPP92177	Application No./Patent No. 03748763.4 - 1242 PCT/KR0301982
Applicant/Proprietor Mirtec Co., Ltd.	

COMMUNICATION

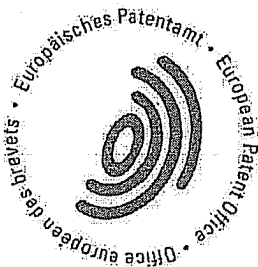
The European Patent Office herewith transmits as an enclosure the supplementary European search report under Article 157(2)(a) EPC for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

- ☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

Refund of the search fee

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





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**SUPPLEMENTARY
EUROPEAN SEARCH REPORT**

Application Number
EP 03 74 8763

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim:	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 01 295140 A (SHARP KK) 28 November 1989 (1989-11-28)	1,5,7	INV. H05K13/08
Y	* abstract *	6,8	
D, Y	KR 2001 0017027 A (JEONG SANG YONG [KR]; SUNGJIN NETECH CO LTD [KR]) 5 March 2001 (2001-03-05)	6,8	
A	* abstract *	1-5,7	
X	US 5 105 149 A (TOKURA NOBUFUMI [JP]) 14 April 1992 (1992-04-14) * column 2, line 60 - column 3, line 27; figure 1 *	1,5,7	
A	JP 59 137803 A (HITACHI LTD; HITACHI ELECTR ENG) 8 August 1984 (1984-08-08) * abstract *	1,7	
A	US 6 043 876 A (HOLLIDAY ALBERT [US] ET AL) 28 March 2000 (2000-03-28) * the whole document *	1,7	TECHNICAL FIELDS SEARCHED (IPC)
			H05K
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search 21 June 2007	Examiner Bolder, Arthur
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after, the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 74 8763

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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21-06-2007

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			JP 3048755 A	01-03-1991
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EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 59137803
PUBLICATION DATE : 08-08-84

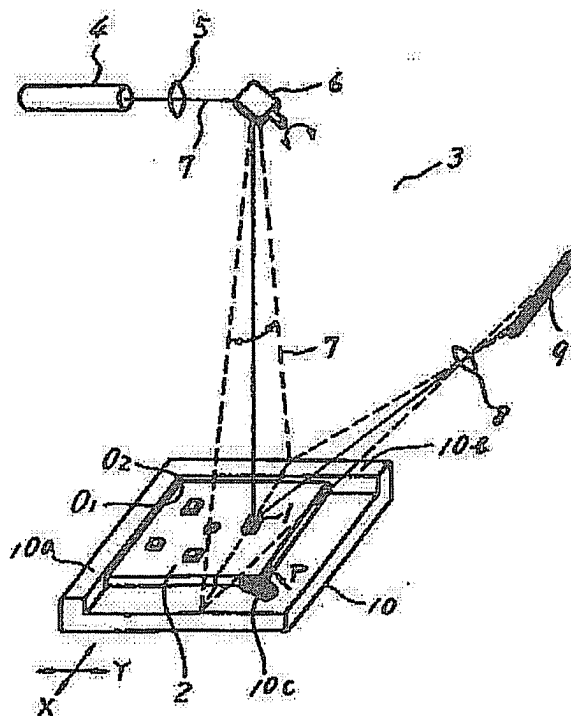
APPLICATION DATE : 28-01-83
APPLICATION NUMBER : 58011520

APPLICANT : HITACHI ELECTRONICS ENG CO LTD;

INVENTOR : MASUDA KOICHI;

INT.CL. : G01B 11/00 H05K 3/00

TITLE : DEVICE FOR DETECTING POSITION
OF COMPONENT PART ATTACHED
TO SUBSTRATE



ABSTRACT : PURPOSE: To detect the deviation of a part and the like highly accurately, by projecting a laser beam to a part on a substrate from the upper part, inspecting the reflected light by an optical sensor, and recognizing the presence and the position of the part.

CONSTITUTION: A laser beam 7, which is emitted from a laser light source 4, is condensed by a light projecting lens 5 and swept by a vibrating mirror 6, and a substrate 2 to be checked, which is mounted on a conveying stage 10, is scanned in the direction of X. The laser beam 7 is reflected by a part 1 or the substrate 2. Since the directions and the intensities of the reflected light beams from the part 1 and the substrate 2 are different, the part 1 is discriminated by utilizing the difference. Namely, only the light, which is projected to the upper surface of the part and reflected, is collected by a light receiving lens 8 and made incident to a light receiving element 9.

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